BLAST Basic Local Alignment Search Tool

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Edit and Resubmit Save Search Strategies Formatting options Download

Protein Sequence (154 letters)

Results for: |cl|57770 None(154aa) 🕶

Your BLAST job specified more than one input sequence. This box lets you choose which input sequence to show BLAST results for.

Query ID

Icl|57770

Description

None

Molecule type

amino acid

Query Length

154

SEQ ID NO: 12

Database Name

nr

Description

All non-redundant GenBank CDS translations+PDB+SwissProt+PIR+PRF excluding environmental samples from WGS projects

Program

BLASTP 2.2.20+ Citation

Reference

Stephen F. Altschul, Thomas L. Madden, Alejandro A. Schäffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and David J. Lipman (1997), "Gapped BLAST and PSI-BLAST: a new generation of protein database search programs", Nucleic Acids Res. 25:3389-3402.

Reference - compositional score matrix adjustment

Stephen F. Altschul, John C. Wootton, E. Michael Gertz, Richa Agarwala, Aleksandr Morgulis, Alejandro A. Schäffer, and Yi-Kuo Yu (2005) "Protein database searches using compositionally adjusted substitution matrices", FEBS J. 272:5101-5109.

Other reports: Search Summary [Taxonomy reports] [Distance tree of results] [Multiple alignment]

Search Parameters

| Program | blastp |
|-------------------------|----------|
| Word size | 3 |
| Expect value | 10 |
| Hitlist size | 100 |
| Gapcosts | 11,1 |
| Matrix | BLOSUM62 |
| Threshold | 11 |
| Composition-based stats | :2 |
| Filter string | F |
| Genetic Code | 1 |
| Window Size | 40 |
| | |

Database

Posted date Jun 3, 2009 5:41 PM Number of letters 3,072,644,098 Number of sequences 8,977,105 Entrez query none

Karlin-Altschul statistics

| Params | Ungapped | Gapped |
|--------|----------|--------|
| Lambda | 0.329052 | 0.267 |
| K | 0.141985 | 0.041 |
| Н | 0.532528 | 0.14 |

Results Statistics

| Length adjustment | 116 |
|------------------------------|-------|
| Effective length of query | 38 |
| Effective length of detabase | 20212 |

Effective length of database 2031299918
Effective search space 77189396884
Effective search space used 77189396884

Graphic Summary

Show Conserved Domains

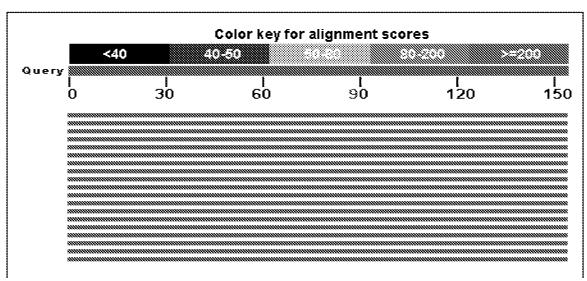
Putative conserved domains have been detected, click on the image below for detailed results.

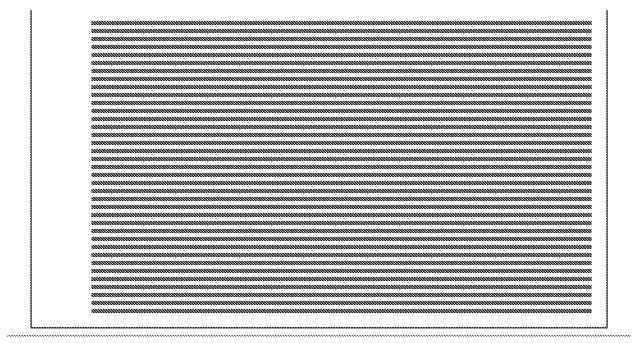


Distribution of 100 Blast Hits on the Query Sequence

[?]

An overview of the database sequences aligned to the query sequence is shown. The score of each alignment is indicated by one of five different colors, which divides the range of scores into five groups. Multiple alignments on the same database sequence are connected by a striped line. Mousing over a hit sequence causes the definition and score to be shown in the window at the top, clicking on a hit sequence takes the user to the associated alignments. New: This graphic is an overview of database sequences aligned to the query sequence. Alignments are color-coded by score, within one of five score ranges. Multiple alignments on the same database sequence are connected by a dashed line. Mousing over an alignment shows the alignment definition and score in the box at the top. Clicking an alignment displays the alignment detail.





Descriptions

| Sequences producing significant alignments: | | Score | |
|--|---|-------------------|-------|
| gbiaRXX39516.11 large \$ protein [Hepatitis B virus] 253 3e-66 gbiaRXX39506.11 large \$ protein [Hepatitis B virus] 253 5e-66 gbiARXX3923.21 large surface antigen [Hepatitis B virus] 253 5e-66 gbiARXX3923.21 large surface antigen [Hepatitis B virus] 253 5e-66 gbiARXX3923.21 large \$ protein [Hepatitis B virus] 253 5e-66 dbjARXX393.21 large \$ protein [Hepatitis B virus] 253 5e-66 dbjARXX393.21 large \$ protein [Hepatitis B virus] 253 5e-66 dbjARXX393.21 large \$ protein [Hepatitis B virus] 253 5e-66 dbjARXX393.21 large \$ protein [Hepatitis B virus] 253 5e-66 dbjARXX393.11 large surface protein [Hepatitis B virus] 253 5e-66 dbjARXX393.1.11 large \$ protein [Hepatitis B virus] 253 6e-66 dbjARXX393.1.11 large \$ protein [Hepatitis B virus] 253 6e-66 dbjARXX393.1.11 large \$ protein [Hepatitis B virus] 253 6e-66 dbjARXX393.1.2.1 large \$ protein [Hepatitis B virus] | E Sequences producing significant alignments: | (Bits) | Value |
| Sh AAA23005.12 large surface antigen [Hepatitis B virus] | gb:AAD37942.1: pre-S/S protein [Hepatitis B virus] | | 3e-66 |
| SpilARAP38058.21 large surface antiqen Hepatitis B virus | | | |
| chiARAS7200.11ER237623.a large/middle/small S proteins [Hepatit | | | |
| DilARA23098.11 large S protein [Hepatitis B virus] 253 5e-66 | | | |
| Del BAZ-91290.1 LHBB [HBV genotype A 253 5e-66 Del Del Del Del Del Del Del Del | | | |
| ### ### ### ### ### ### ### ### ### ## | | | |
| 252 5e-66 251 | | | |
| SpiRS341.3 September SpiRS33 RecName: Full-Large envelope protein; 252 5e-66 | | | |
| day day | | | |
| bb BAB664315.11 large surface protein [Hepatitis B virus] 253 6e-66 bb BAB66373.11 large surface protein [Hepatitis B virus] 253 6e-66 bb BAB6831.11 large surface antigen [Hepatitis B virus] 253 6e-66 bb BAB681672.11 surface antigen [Hepatitis B virus] 253 6e-66 bb BAB6820.11 surface antigen [Hepatitis B virus] 253 6e-66 bb BAB6820.11 surface antigen [Hepatitis B virus] 253 6e-66 bb BAB6820.11 large S protein [Hepatitis B virus] 253 6e-66 bb BAB6820.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB6820.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB6820.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB683614.11 pre51+pre52+BB548 [syrus] 252 6e-66 bb BAB683614.11 pre51+pre52+BB548 [syruthetic construct] > gb AAN7610.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB6874374.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB6874374.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB674383.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB674383.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB674383.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB674383.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB674383.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB74383.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB74383.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB74383.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB74383.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB74383.11 large S protein [Hepatitis B virus] 252 6e-66 bb BAB74383.11 large S prote | | | |
| Description | | | |
| abjisabc2316.1 large surface protein [Hepatitis B virus] 253 6e-66 abbicAc51294.1 large surface antigen [Hepatitis B virus] 253 6e-66 abjisabc3292.1 large S protein [Hepatitis B virus] 253 6e-66 abjisabc320.1 surface antigen [Hepatitis B virus] 253 6e-66 bisabc320.1 surface antigen [Hepatitis B virus] 253 6e-66 bisabc322.1 large S protein [Hepatitis B virus] 252 6e-66 bisabc323.1 large S protein [Hepatitis B virus] 252 6e-66 bisabc343.1 large S protein [Hepatitis B virus] 252 6e-66 bisabc343.1 large S protein [Hepatitis B virus] 252 6e-66 bisabc343.1 large S protein [Hepatitis B virus] 252 6e-66 bisabc343.1 large S protein [Hepatitis B virus] 252 6e-66 bisabc343.1 large S protein [Hepatitis B virus] 252 6e-66 bisabc343.1 large S protein [Hepatitis B virus] 252 6e-66 bisabc343.1 large S protein [Hepatitis B virus] 252 6e-66 | | 253 | |
| Smb10AC51294.11 large Surface antigen [Hepatitis B virus] 253 6e-66 | | | |
| SpinCFSSQ17.11 large S protein [Hepatitis B virus] 253 6e-66 6bj[BAF81672.11 surface antigen [Hepatitis B virus] 253 6e-66 6e-66 6bj[BAF81679.11 large S protein [Hepatitis B virus] 252 6e-66 6e-66 6bj[BAF81679.11 large S protein [Hepatitis B virus] 252 6e-66 6e-66 | | | |
| abdilARE81672.11 pres/S protein [Hepatitis B virus] 253 6e-66 ghlARA6820.11 surface antigen [Hepatitis B virus] 253 6e-66 chlARA67095.11 large S protein [Hepatitis B virus] 252 6e-66 chlARA67092.11 large S protein [Hepatitis B virus] 252 6e-66 chlAC055252.11 large S protein [Hepatitis B virus] 252 6e-66 ghlARA67058.11 pres1+pres2+HBsAg [synthetic construct] >ghlAAL. 252 6e-66 ghlARA67058.11 pres1-protein [Hepatitis B virus] 252 6e-66 ghlARA67058.11 pres2-protein [Hepatitis B virus] 252 6e-66 ghlARA67058.11 large S protein [Hepatitis B virus] 252 6e-66 ghlARA6736.11 large S protein [Hepatitis B virus] 252 6e-66 ghlARA6736.11 large S protein [Hepatitis B virus] 252 6e-66 ghlARA6736.11 large S protein [Hepatitis B virus] 252 6e-66 ghlARA6736.11 large S protein [Hepatitis B virus] 252 6e-66 ghlARA6736.11 large S protein [Hepatitis B virus] 252 | | | |
| gb AAR69209.1 surface antigen Hepatitis B virus 252 6e-66 gb AAR67092.1 large S protein Hepatitis B virus 252 6e-66 gb AAR67092.1 large S protein Hepatitis B virus 252 6e-66 gb AAR67692.1 large S protein Hepatitis B virus 252 6e-66 gb AAR69874.1 large S protein Hepatitis B virus 252 6e-66 gb AAR69874.1 large S protein Hepatitis B virus 252 6e-66 gb AAR697098.1 large S protein Hepatitis B virus 252 6e-66 gb AAR697098.1 large S protein Hepatitis B virus 252 6e-66 gb AAR697467.1 large S protein Hepatitis B virus 252 6e-66 gb AAR697467.1 large S protein Hepatitis B virus 252 6e-66 gb AAR697467.1 large S protein Hepatitis B virus 252 6e-66 gb AAR697467.1 large S protein Hepatitis B virus 252 6e-66 gb AAR697393.1 large S protein Hepatitis B virus 252 6e-66 gb AAR697393.1 large S protein Hepatitis B virus 252 6e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 6e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 6e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 6e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 6e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 6e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 6e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 6e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 6e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 8e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 8e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 8e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 8e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 8e-66 gb AAR69736.1 large S protein Hepatitis B virus 252 9e-66 gb AAR69736.1 lar | | | |
| BahAR07396.1 large S protein Hepatitis B virus >gb AAT904 252 6e-66 db AR07392.1 large S protein Hepatitis B virus >gb AAT904 252 6e-66 db AR07392.1 large S protein Hepatitis B virus 252 6e-66 db AR075252.1 large S protein Hepatitis B virus 252 6e-66 db AR07619.1 Pre51+Pre52+HBSAg [synthetic construct] >gb AA 252 6e-66 db AR07619.1 pre51-pre52+HBSAg [synthetic s virus 252 6e-66 db AR07619.1 pre51-pre51-protein Hepatitis B virus 252 6e-66 db AR07619.1 pre51-protein Hepatitis B virus 252 6e-66 db AR07619.1 large S protein Hepatitis B virus 252 6e-66 db AR07619.1 large S protein Hepatitis B virus 252 6e-66 db AR07619.1 large S protein Hepatitis B virus 252 6e-66 db AR07619.1 large S protein Hepatitis B virus 252 6e-66 db AR074766.1 large S protein Hepatitis B virus 252 6e-66 db AR074766.1 large S protein Hepatitis B virus 252 6e-66 db AR074766.1 large S protein Hepatitis B virus 252 6e-66 db AR074766.1 large S protein Hepatitis B virus 252 6e-66 db AR074768.1 large S protein Hepatitis B virus 252 6e-66 db AR074768.1 large S protein Hepatitis B virus 252 6e-66 db AR074768.1 large S protein Hepatitis B virus 252 7e-66 db AR074768.1 large S protein Hepatitis B virus 252 8e-66 db AR074768.1 large S protein Hepatitis B virus 252 8e-66 db AR074789.1 large S protein Hepatitis B virus 252 8e-66 db AR074898.1 large S protein Hepatitis B virus 252 8e-66 db AR074898.1 large S protein Hepatitis B virus 252 8e-66 db AR074898.1 large S protein Hepatitis B virus 252 9e-66 db AR074898.1 large S protein Hepatitis B virus 252 9e-66 db AR074898.1 large S protein Hepatitis B virus 252 9e-66 db AR074898.1 large S protein Hepatitis B virus 252 9e-66 db AR074898.1 large S protein Hepatitis B viru | | 253 | |
| cblaARG0392.11 large S protein [Hepatitis B virus] 252 6e-66 cblAC055252.11 large S protein [Hepatitis B virus] 252 6e-66 cblAC055252.11 large S protein [Hepatitis B virus] 252 6e-66 cblARAS07619.11 pre51+pre52+HBsAg [synthetic construct] >gblAA 252 6e-66 cblARAS07619.11 pre51 protein [Hepatitis B virus] 252 6e-66 cblARAS07619.11 large S protein [Hepatitis B virus] 252 6e-66 cblARAS07619.11 large S protein [Hepatitis B virus] 252 6e-66 cblARAS07619.11 large S protein [Hepatitis B virus] 252 6e-66 cblARAS07619.1.1 large S protein [Hepatitis B virus] 252 6e-66 cblARAS07619.1.1 large S protein [Hepatitis B virus] 252 6e-66 cblARAS07619.1.1 large S protein [Hepatitis B virus] 252 6e-66 cblARAS07619.1.1 large S protein [Hepatitis B virus] 252 6e-66 cblARAS07619.1.1 large S protein [Hepatitis B virus] 252 6e-66 cblARAS0761.1.1 large S protein [Hepatitis B virus] <td></td> <td>252</td> <td></td> | | 252 | |
| StickCF95172.11 large S protein [Hepatitis B virus] 252 6e-66 StickCF95252.11 large S protein [Hepatitis B virus] 252 6e-66 StickCF95193.11 StickCF95193.11 large S protein [Hepatitis B virus] 252 6e-66 StickCF95193.11 large S protein [Hepatitis B virus] 252 6e-66 StickCF95193.11 large S protein [Hepatitis B virus] 252 6e-66 StickCF95193.11 large S protein [Hepatitis B virus] 252 6e-66 StickCF95193.11 large S protein [Hepatitis B virus] 252 6e-66 StickCF95193.11 large S protein [Hepatitis B virus] 252 6e-66 StickCF95193.11 large S protein [Hepatitis B virus] 252 6e-66 StickCF95193.11 large S protein [Hepatitis B virus] 252 6e-66 StickCF95193.11 large S protein [Hepatitis B virus] 252 6e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 6e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 6e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 6e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 6e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 6e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 6e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 7e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 8e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 8e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 8e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 8e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 8e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 9e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 9e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 9e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 9e-66 StickCAP43792.11 large S protein [Hepatitis B virus] 252 9e- | <pre>gb AAR07092.1 large S protein [Hepatitis B virus] >gb AAT904</pre> | | 6e-66 |
| Selando Sela | gb[ACF95172.1] large S protein [Hepatitis B virus] | 252 | 6e-66 |
| gblAAK58574.ii PreSI+PreS2+HBsAg [synthetic construct] >gb AA 252 6e-66 gblAAK707098.ii pre-S1 protein [Hepatitis B virus] 252 6e-66 gblAAK73610.ii preS/S protein [Hepatitis B virus] 252 6e-66 gblAAK23673.ii preS/S protein [Hepatitis B virus] 252 6e-66 gblAAK7457.ii large S protein [Hepatitis B virus] 252 6e-66 gblAAK7459.3i large S protein [Hepatitis B virus] 252 6e-66 gblAAK7459.3i large S protein [Hepatitis B virus] 252 6e-66 gblAAK7456.ii large S protein [Hepatitis B virus] 252 6e-66 gblAAK7486.ii large S protein [Hepatitis B virus] 252 6e-66 gblAAK7486.ii large S protein [Hepatitis B virus] 252 6e-66 gblAAK7488.ii large S protein [Hepatitis B virus] 252 6e-66 gblAAK7488.ii large S protein [Hepatitis B virus] 252 7e-66 gblAAK7488.ii large S protein [Hepatitis B virus] 252 7e-66 gblAAK7488.ii large S protein [Hepatitis B virus] 252 | gb[ACD65252.1] large S protein [Hepatitis B virus] | 252 | 6e-66 |
| ShiAAR07098.11 | <pre>gb AAK58874.1 PreS1+PreS2+HBsAg [synthetic construct] >gb AA</pre> | 252 | 6e-66 |
| DeliBar Company Comp | | | 6e-66 |
| deliaae92978.i large S protein [Hepatitis B virus] 252 6e-66 deliaae979503.i large S protein [Hepatitis B virus] 252 6e-66 deliae795993.i large S protein [Hepatitis B virus] 252 6e-66 deliae795933.i large S protein [Hepatitis B virus] 252 6e-66 deliae84792.i surface protein S [Hepatitis B virus] 252 6e-66 deliae847466.i large S protein [Hepatitis B virus] 252 6e-66 deliae847466.i large S protein [Hepatitis B virus] 252 6e-66 deliae847466.i large S protein [Hepatitis B virus] 252 6e-66 deliae847468.i large S protein [Hepatitis B virus] 252 6e-66 deliae847468.i large S protein [Hepatitis B virus] 252 7e-66 deliae847468.i large surface antigen [Hepatitis B virus] 252 8e-66 deliae847198.i large surface antigen [Hepatitis B virus] 252 8e-66 deliae847198.i large surface antigen [Hepatitis B virus] 252 8e-66 deliae842988.i large S protein [Hepatitis B virus] 252 8e-66 deliae8481323.i large S protein [Hepatitis B virus] 252 8e-66 deliae8481323.i large S protein [Hepatitis B virus] 252 8e-66 deliae8481323.i large S protein [Hepatitis B virus] 252 8e-66 deliae8481323.i large S protein [Hepatitis B virus] 252 9e-66 deliae843823.i large S protein [Hepatitis B virus] 252 9e-66 deliae843823.i large S protein [Hepatitis B virus] 252 9e-66 deliae843823.i large S protein [Hepatitis B virus] 252 9e-66 deliae843823.i large S protein [Hepatitis B virus] 252 9e-66 deliae843823.i large S protein [Hepatitis B virus] 252 9e-66 deliae843823.i large S protein [Hepatitis B virus] 252 9e-66 deliae843823.i large S protein [Hepatitis B virus] 252 9e-66 deliae843823.i large S protein [Hepatitis B virus] 252 9e-66 deliae843823.i large S protein [Hepatitis B virus] 252 9e-66 deliae843823.i large S protein [Hepatitis B virus] 252 9e-66 deliae843823.i large S protein [Hepatitis B virus] 252 | | | |
| gbiAAE37467.1i large S protein 252 6e-66 gbiACF35903.1i large S protein [Hepatitis B virus] 252 6e-66 mbiCAA84792.1i large S protein [Hepatitis B virus] 252 6e-66 gbiAAE347466.1i large S protein 252 6e-66 gbiAAC93830.1i large S protein [Hepatitis B virus] 252 6e-66 gbiAAC95259.1i large S protein [Hepatitis B virus] 252 6e-66 gbiAAD37468.1i large S protein 252 7e-66 gbiAAD37346.1i large surface antigen [Hepatitis B virus] 252 8e-66 gbiAAD37346.1i pre-5/S protein [Hepatitis B virus] 252 8e-66 gbiAAD37346.1i pre-5/S protein [Hepatitis B virus] 252 8e-66 gbiAAD37346.1i pre-5/S protein [Hepatitis B virus] 252 8e-66 gbiAAC35271.1i large S protein [Hepatitis B virus] 252 8e-66 gbiAAC3323.1i large S protein [Hepatitis B virus] 252 8e-66 gbiAAC3323.1i large S protein [Hepatitis B virus] 252 8e-66 gbiAAC | | 252 | |
| SpiaCF55903.1 large S protein [Hepatitis B virus] 252 6e-66 | | <u>252</u> | |
| Stace Spring State Sta | | | |
| ambicAA84792.1; surface protein S [Hepatitis B virus] 252 6e-66 gblAAB47466.1; large S protein 252 6e-66 gblAAB43630.1; large S protein [Hepatitis B virus] 252 6e-66 gblAAD43630.1; large S protein [Hepatitis B virus] 252 7e-66 gblAAD49215.11AF030841.4 PreS1+PreS2+HBSAG [Hepatitis B virus] 252 7e-66 gblAAD49215.11AF030841.4 PreS1+PreS2+HBSAG [Hepatitis B virus] 252 8e-66 gblAAD49215.1 PreS1+PreS2+HBSAG [Hepatitis B virus] 252 8e-66 gblAAD43874.1 PreS1+PreS2+HBSAG [He | | | |
| gbiAAB47866.l! large S protein 252 6e-66 gbiABQ43830.li large S protein [Hepatitis B virus] 252 6e-66 gbiAAC065259.li large S protein [Hepatitis B virus] 252 6e-66 gbiAAB47868.li large S protein 252 7e-66 gbiAAD44215.llar630841.4 PreS1+PreS2+HBsAg [Hepatitis B virus] 252 7e-66 gbiAAD37946.1; pre-S/S protein [Hepatitis B virus] 252 8e-66 gbiAAC3796.1iar297623.4 large/middle/small S proteins [Hepati 252 8e-66 gbiAAC43298.li large S protein [Hepatitis B virus] 252 8e-66 gbiAAC43298.li large S protein [Hepatitis B virus] 252 8e-66 gbiAAC43298.li large S protein [Hepatitis B virus] 252 8e-66 gbiAAC43227.li large S protein [Hepatitis B virus] 252 8e-66 gbiAAC4528.li Bl wild-type molecule; ORF1 [Hepatitis B virus] 252 9e-66 gbiAAC48528.li large S protein [Hepatitis B virus] 252 9e-66 gbiAAC486831.li large S protein [Hepatitis B virus] 252 | | | |
| gb ABQ43830.1 large S protein [Hepatitis B virus] 252 6e-66 gb ACD65259.1 large S protein [Hepatitis B virus] 252 6e-66 gb AAB47668.1 large S protein [Hepatitis B virus] 252 7e-66 gb AAB40215.1 AF030841 4 PreS1+PreS2+HBSAG [Hepatitis B virus] 252 7e-66 gb AAB4737846.1 large surface antigen [Hepatitis B virus] 252 8e-66 gb AAB47196.1 AF237623 4 large/middle/small S proteins [Hepat 252 8e-66 gb AAB47196.1 AF237623 4 large/middle/small S proteins [Hepat 252 8e-66 gb AAB43888.1 large S protein [Hepatitis B virus] 252 8e-66 gb AAB43888.1 large S protein [Hepatitis B virus] 252 8e-66 gb AAB4383.1 large S protein [Hepatitis B virus] 252 8e-66 gb AAB43873.1 large S protein [Hepatitis B virus] 252 9e-66 gb AAB4383.1 large S protein [Hepatitis B virus] 252 9e-66 gb AAB43819.1 large S protein [Hepatitis B virus] 252 9e-66 gb AAB43819.1 large S protein [Hepa | | | |
| gb ACD65259.li large S protein [Hepatitis B virus] 252 6e-66 gb AAB47468.li large S protein 252 7e-66 gb AAD30215.liAF030841.4 PreSl+PreS2+HBSAG [Hepatitis B virus] 252 7e-66 gb AAD37346.li large surface antigen [Hepatitis B virus] 252 8e-66 gb AAA97196.liAF297623.4 large/middle/small S proteins [Hepat 252 8e-66 gb AAY25271.li large S protein [Hepatitis B virus] 252 8e-66 gb AACH81323.li large S protein [Hepatitis B virus] 252 8e-66 gb AACH81323.li large S protein [Hepatitis B virus] 252 8e-66 gb AAA9574.li large S protein [Hepatitis B virus] 252 8e-66 gb AAA9578.li Bl wild-type molecule; ORF1 [Hepatitis B virus] 252 9e-66 gb AAA9528.li Bl wild-type molecule; ORF1 [Hepatitis B virus] 252 9e-66 gb AAA9589.li large S protein [Hepatitis B virus] 252 9e-66 gb AAA9589.li large S protein [Hepatitis B virus] 252 9e-66 gb AAA9589.li large S protein [H | | | |
| gb!AAB47468.1! large S protein 252 7e-66 gb!AAD40215.1 AF030841 4 PreS1+PreS2+HBsAg [Hepatitis B virus] 252 7e-66 gb!AAD37946.1! large surface antigen [Hepatitis B virus] 252 8e-66 gb!AAB57196.1 AF297623 4 large/middle/small S proteins [Hepat 252 8e-66 gb!AAB543898.1! large S protein [Hepatitis B virus] 252 8e-66 gb!AAC43898.1! large S protein [Hepatitis B virus] 252 8e-66 gb!AAC43894.1! large S protein [Hepatitis B virus] 252 8e-66 gb!AAC43874.1! large S protein [Hepatitis B virus] 252 8e-66 gb!AAC43874.1! large S protein [Hepatitis B virus] 252 9e-66 gb!AAC43874.1! large S protein [Hepatitis B virus] 252 9e-66 gb!AAC43874.1! large S protein [Hepatitis B virus] 252 9e-66 gb!AAC43894.1! large S protein [Hepatitis B virus] 252 9e-66 gb!AAC25278.1! large S protein [Hepatitis B virus] 252 9e-66 gb!AAC25278.1! large S protein [Hepatitis B virus] 252 9e-66< | | | |
| gb:AAD40215.1 AF030841 4 PreS1+PreS2+HBSAg [Hepatitis B virus] 252 7e-66 emb/CAL23861.1 large surface antigen [Hepatitis B virus] 252 8e-66 gb:AAB037946.1 pre-S/S protein [Hepatitis B virus] 252 8e-66 gb:AAR97196.1 AR297623 4 large/middle/small S proteins [Hepati 252 8e-66 gb:AAR043898.1 large S protein [Hepatitis B virus] 252 8e-66 gb:AAR25271.1 large S protein [Hepatitis B virus] 252 8e-66 gb:AAR043874.1 large S protein [Hepatitis B virus] 252 8e-66 gb:AAR043874.1 large S protein [Hepatitis B virus] 252 9e-66 gb:AAR043874.1 large S protein [Hepatitis B virus] 252 9e-66 emb:CAQ86627.1 large S protein [Hepatitis B virus] 252 9e-66 gb:AAR04389.1 large S protein [Hepatitis B virus] 252 9e-66 gb:AAR04389.1 large S protein [Hepatitis B virus] 252 9e-66 gb:AAR04389.1 large S protein [Hepatitis B virus] 252 9e-66 gb:AAR04389.1 large S protein [Hepatitis | - L | | |
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| gb:AAD37946.1: pre-S/S protein [Hepatitis B virus] 252 8e-66 gb:AAK97196.1:AF297623.4 large/middle/small S proteins [Hepat | | 252 | |
| gb: AAK97196.1 AF297623.4 large/middle/small S proteins [Hepat 252 8e-66 gb: ABQ43898.1 large S protein [Hepatitis B virus] 252 8e-66 gb: AAY25271.1 large S protein [Hepatitis B virus] 252 8e-66 gb: ABQ43874.1 large S protein [Hepatitis B virus] 252 9e-66 gb: AAA45528.1 Bl wild-type molecule; ORF1 [Hepatitis B virus] 252 9e-66 gmb: CAQ86627.1 large S protein [Hepatitis B virus] 252 9e-66 gmb: CAQ86631.1 large S protein [Hepatitis B virus] 252 9e-66 gb: ABQ43894.1 large S protein [Hepatitis B virus] 252 9e-66 gb: ABQ43894.1 large S protein [Hepatitis B virus] 252 9e-66 gb: ABQ43894.1 large S protein [Hepatitis B virus] 252 9e-66 gb: ABQ43894.1 large S protein [Hepatitis B virus] 252 9e-66 gb: ABQ43922.1 large S protein [Hepatitis B virus] 252 1e-65 gb: ABQ43823.1 large S protein [Hepatitis B virus] 252 1e-65 gb: ABQ43823.1 large S protein [Hepatitis B virus] 252 1e-65 gb: ABQ43823. | | | |
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| gb ABQ43874.1 large S protein [Hepatitis B virus] >gb ABQ438 252 9e-66 gb AAA45528.1 Bl wild-type molecule; ORF1 [Hepatitis B virus] 252 9e-66 emb CAQ86627.1 large S protein [Hepatitis B virus] 252 9e-66 gb ABQ43819.1 large S protein [Hepatitis B virus] 252 9e-66 gb ABQ43894.1 large S protein [Hepatitis B virus] 252 9e-66 gb AAY25278.1 large S protein [Hepatitis B virus] 252 9e-66 gb AAY25216.1 large S protein [Hepatitis B virus] 252 9e-66 gb ABQ43922.1 large S protein [Hepatitis B virus] 252 1e-65 gb ABQ43823.1 large S protein [Hepatitis B virus] 252 1e-65 gb AAY25230.1 large S protein [Hepatitis B virus] 252 1e-65 gb AAR07101.1 large S protein [Hepatitis B virus] 252 1e-65 gb AAR07101.1 large S protein [Hepatitis B virus] 252 1e-65 gb AAR0702.1 envelope protein [Hepatitis B virus] 252 1e-65 | | 252 | 8e-66 |
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| gb:ABQ43819.1: large S protein [Hepatitis B virus] 252 9e-66 gb:ABQ43894.1: large S protein [Hepatitis B virus] 252 9e-66 gb:AAY25278.1: large S protein [Hepatitis B virus] 252 9e-66 gb:AAY25216.1: large S protein [Hepatitis B virus] 252 9e-66 gb:ABQ43922.1: large S protein [Hepatitis B virus] 252 1e-65 gb:ABW03088.1: large S protein [Hepatitis B virus] 252 1e-65 gb:AAY25230.1: large S protein [Hepatitis B virus] 252 1e-65 gb:AAR07101.1: large S protein [Hepatitis B virus] 252 1e-65 gb:AABD37002.1: envelope protein [Hepatitis B virus] 252 1e-65 | | | |
| gb ASC43894.1 large S protein [Hepatitis B virus] 252 9e-66 gb AAY25278.1 large S protein [Hepatitis B virus] 252 9e-66 gb AAY25216.1 large S protein [Hepatitis B virus] 252 9e-66 gb ABC43922.1 large S protein [Hepatitis B virus] 252 1e-65 gb ABC43823.1 large S protein [Hepatitis B virus] 252 1e-65 gb AAY25230.1 large S protein [Hepatitis B virus] 252 1e-65 gb AAR07101.1 large S protein [Hepatitis B virus] 252 1e-65 gb AABD37002.1 envelope protein [Hepatitis B virus] 252 1e-65 | | <u> </u> | |
| gb AAY25278.1 large S protein [Hepatitis B virus] 252 9e-66 gb AAY25216.1 large S protein [Hepatitis B virus] 252 9e-66 gb AEQ43922.1 large S protein [Hepatitis B virus] 252 1e-65 gb ABW03088.1 large S protein [Hepatitis B virus] 252 1e-65 gb ABQ43823.1 large S protein [Hepatitis B virus] 252 1e-65 gb AAY25230.1 large S protein [Hepatitis B virus] 252 1e-65 gb AAR07101.1 large S protein [Hepatitis B virus] 252 1e-65 gb ABD37002.1 envelope protein [Hepatitis B virus] 252 1e-65 | | <u>404</u> | |
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| gb[ABD37002.1] envelope protein [Hepatitis B virus] 252 1e-65 | | | |
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| gb AAY25237.1 | large S protein [Hepatitis B virus] | 251 | 1e-65 |
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| gb AEZ85698.1 | large S protein [Hepatitis B virus] | 251 | 1e-65 |
| gb[AAD37938.1] | pre-S2/S protein [Hepatitis B virus] | <u> 251</u> | 1e-65 |
| dbj BAR94219,1 | Large S protein [Hepatitis B virus] | 251 | 1e-65 |
| gb AAQ81933.1 | surface protein [Hepatitis B virus] | 251 | 1e-65 |
| emb CAQ86619.1 | | 251 | 1e-65 |
| gb ACH81331.1 | large S protein [Hepatitis B virus] | 251 | 1e-65 |
| gb AAP79727,1 | large S protein [Hepatitis B virus] | 251 | 1e-65 |
| | F090842 4 PreS1+PreS2+HBsAg [Hepatitis B virus] | 251 | 1e-65 |
| qb ABQ43931.1 | large S protein [Hepatitis B virus] | 251 | 1e-65 |
| gb AAQ81917.1 | surface protein [Hepatitis B virus] | 251 | 1e-65 |
| dbj BAG68764.1 | | 251 | 1e-65 |
| gb AAC58024.3 | large surface antigen [Hepatitis B virus] | 251 | 1e-65 |
| gb ACF95018.1 | middle S protein [Hepatitis B virus] | 251 | 1e-65 |
| gb ABQ43831.1 | middle S protein [Hepatitis B virus] | 251 | 1e-65 |
| gb ABQ43886.1 | large S protein [Hepatitis B virus] | 251 | 2e-65 |
| gb ABA18795.1 | middle S protein [Hepatitis B virus] | 251 | 2e-65 |
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| gb AAM96927.1 | middle S protein [Hepatitis B virus] | 251 | 2e-65 |
| gb ABQ43928.1 | large S protein [Hepatitis B virus] | 251 | 2e-65 |
| gb ABQ43895.1 | middle S protein [Hepatitis B virus] | 251 | 2e-65 |
| qb ABH04419.1 | middle surface protein [Hepatitis B virus] | 251 | 2e-65 |
| gb[ABQ43854.1] | large S protein [Hepatitis B virus] | 251 | 2e-65 |
| dbj[BAG68776.1] | PreS1-S protein [Hepatitis B virus] | 251 | 2e-65 |
| gb[ACI16298.1] | S protein [Hepatitis B virus] | 251 | 2e-65 |
| gb ABQ43923.1 | middle S protein [Hepatitis B virus] >gb ACD65 | 251 | 2e-65 |
| dbj BAE94223.1 | Large S protein [Hepatitis B virus] | 251 | 2e-65 |
| gb[AAT90410.1] | large S protein [Hepatitis B virus] | <u> 250</u> | 2e-65 |
| gb AA012699.1 | preS1 [Hepatitis B virus] | 250 | 2e-65 |
| gb ABQ43932.1 | middle S protein [Hepatitis B virus] | <u>250</u> | 2e-65 |
| gb[AA012705.1] | preS1 [Hepatitis B virus] | <u> 250</u> | 3e-65 |
| gb[ACE77880.1] | middle S protein [Hepatitis B virus] | 250 | 3e-65 |
| gb[ABI15483.1] | <pre>pre-S2 protein [Hepatitis B virus] >gb ABI1549</pre> | <u> 250</u> | 3e-65 |
| gb ABO41307.1 | S protein [Hepatitis B virus] | 250 | 3e-65 |
| gb ABM90718.1 | HBsAg [Hepatitis B virus] | <u> 250</u> | 3e-65 |
| gb AA012693.1 | preS1 [Hepatitis B virus] | <u> 250</u> | 3e-65 |
| gb[ABQ43887.1] | middle S protein [Hepatitis B virus] | <u> 250</u> | 3e-65 |
| gb[ABI15528.1] | pre-S2 protein [Hepatitis B virus] | <u> 250</u> | 3e-65 |
| gb AB041295.1 | S protein [Hepatitis B virus] >gb ABO41296.1 | 250 | 3e-65 |
| gb ABM90729.1 | HBsAg [Hepatitis B virus] | 250 | 3e-65 |
| gb AB041267.1 | S protein [Hepatitis B virus] >gb ABO41268.1 | 250 | 4e-65 |
| gb ABI15532.1 | pre-S2 protein [Hepatitis B virus] | 250 | 4e-65 |
| | | | |

Alignments Select All Get selected sequences Distance tree of results Multiple alignment

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Score = 253 bits (647), Expect = 3e-66, Method: Compositional matrix adjust. Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
         GGSPVCLGQNSQSPTSNHSPTSCPPICPGYRWMCLRRFIIFLFILLLCLIFLLVLLDYQG 60
Sbjct 217
                                                           276
         MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
     61
Query
Sbjet 277
         Sbjct 337
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Length=398
Score = 253 bits (646), Expect = 4e-66, Method: Compositional matrix adjust. Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
         GGSPVCLGQNSQSPTSNHSPTSCPPICPGYRWMCLRRFIIFLFILLLCLIFLLVLLDYQG
Sbjct 215
                                                            274
Query 61
Sbjot 275
         MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
         334
     Query
Sbjet 335
>qb|AAC58025.2| large surface antigen [Hepatitis B virus]
Length=389
Score = 253 \text{ bits } (645),
                    Expect = 5e-66, Method: Compositional matrix adjust.
Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
Query 1
Sbjct 206
         GGSPVCLGQNSQSPTSNHSPTSCPPICPGYRWMCLRRFIIFLFILLLCLIFLLVLLDYQG 60
         MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
Query 61
Sbjat 266
         325 .....r...p......
Query 121 WVWASVRFSWLSLLVPFVRWFVGLSPTVWLSAIW 154
Sbjct 326 .m..... 359
>gb|AAK97200.1|AF297624_4 large/middle/small S proteins [Hepatitis B virus]
Length=389
Score = 253 bits (645), Expect = 5e-66, Method: Compositional matrix adjust.
Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
         GGSPVCLGONSOSPTSNHSPTSCPPICPGYRWMCLRRFIIFLFILLLCLIFLLVLLDYOG 60
Sbjct 206
         265
         MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
     61
Ouerv
WVWASVRFSWLSLLVPFVRWFVGLSPTVWLSAIW 154
Query
     121
         .x..... 359
>gb|AAZ23008.1| large S protein [Hepatitis B virus]
Length=398
Score = 253 bits (645), Expect = 5e-66, Method: Compositional matrix adjust.
Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
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Sbjct 215
         MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
     61
Sbjot 275
         334
     Ouerv
Sbjct 335
>dbj|BAD91280.1| LHBs [HBV genotype A]
Length=400
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Sbjct 217
           MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
      61
Query
Sbjet 337
>emb|CAF28873.2| preS1/preS2/S surface protein [Hepatitis B virus]
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Score = 253 bits (645), Expect = 5e-66, Method: Compositional matrix adjust. Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
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Query 61
Sbjct 273
          MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
          .....T.....P......
                                                                    332
      Query 121
Sbjat 333
>qb|ACH86089.1| large S protein [Hepatitis B virus]
Length=390
 Score = 253 bits (645),
                       Expect = 5e-66, Method: Compositional matrix adjust.
 Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
Query 1
Sbjct 217
           GGSPVCLGQNSQSPTSNHSPTSCPPICPGYRWMCLRRFIIFLFILLLCLIFLLVLLDYQG 60
Query 61
Sbjct 277
          MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
          >sp|P03141.3|HBSAG_HBVA3 RecName: Full=Large envelope protein; AltName: Full=Lar
protein; AltName: Full=L glycoprotein; AltName: Full=Major
surface antigen; AltName: Full=Large S protein; AltName:
Full=L-HBsAg; Short=LHB
emb|CAA26539.1| unnamed protein product [Hepatitis B virus]
Length=400
 Score = 253 bits (645), Expect = 5e-66, Method: Compositional matrix adjust. Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
           GGSPVCLGQNSQSPTSNHSPTSCPPICPGYRWMCLRRFIIFLFILLLCLIFLLVLLDYQG 60
Query 1
Sbjct 217
           MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
          Sbjct 277
Query 121 WVWASVRFSWLSLLVPFVRWFVGLSPTVWLSAIW 154
Sbjot 337
          .E..... 370
>dbj|BAF48757.1| envelope protein [Hepatitis B virus]
Length=400
Score = 253 bits (645), Expect = 5e-66, Method: Compositional matrix adjust. Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
           GGSPVCLGONSOSPTSNHSPTSCPPICPGYRWMCLRRFIIFLFILLLCLIFLLVLLDYOG 60
Ouerv 1
Sbjct 217
          MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
Query
      61
121 WVWASVRFSWLSLLVPFVRWFVGLSPTVWLSAIW 154
Sbjct 337 .E..... 370
```

```
>qb|ABH04415.1| large surface protein [Hepatitis B virus]
Length=398
 Score = 253 bits (645), Expect = 5e-66, Method: Compositional matrix adjust.
 Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
          GGSPVCLGONSOSPTSNHSPTSCPPICPGYRWMCLRRFIIFLFILLLCLIFLLVLLDYOG 60
Sbjct 215
          MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
Ouerv 61
          334
      121 WVWASVRFSWLSLLVPFVRWFVGLSPTVWLSAIW 154
Query
Sbjct 335 .ജ..... 368
>dbj|BAG68757.1| PreS1-S protein [Hepatitis B virus]
Length=400
 Score = 253 bits (645), Expect = 6e-66, Method: Compositional matrix adjust.
 Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
          GGSPVCLGQNSQSPTSNHSPTSCPPICPGYRWMCLRRFIIFLFILLLCLIFLLVLLDYQG 60
Sbjct 217
          MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
Sbjot 277
          336
          WVWASVRFSWLSLLVPFVRWFVGLSPTVWLSAIW 154 370
Query 121
Sbjct 337
      121
>dbj|BAD02316.1| large surface protein [Hepatitis B virus]
Length=400
Score = 253 bits (645), Expect = 6e-66, Method: Compositional matrix adjust. Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
          GGSPVCLGQNSQSPTSNHSPTSCPPICPGYRWMCLRRFIIFLFILLLCLIFLLVLLDYQG 60
Sbjct 217
Query 61
Sbjct 277
          MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
      121 WVWASVRFSWLSLLVPFVRWFVGLSPTVWLSAIW 154
Sbict 337
          .z..... 370
>emb|CAC51294.1| large surface antigen [Hepatitis B virus]
Length=400
 Score = 253 bits (645), Expect = 6e-66, Method: Compositional matrix adjust. Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
          GGSPVCLGONSOSPTSNHSPTSCPPICPGYRWMCLRRFIIFLFILLLCLIFLLVLLDYOG 60
Sbjct 217
          MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
          Sbjet 277
      121 WVWASVRFSWLSLLVPFVRWFVGLSPTVWLSAIW 154
          Sbjet 337
>gb|ACF95017.1| large S protein [Hepatitis B virus]
Length=400
Score = 253 bits (645), Expect = 6e-66, Method: Compositional matrix adjust. Identities = 149/154 (96%), Positives = 150/154 (97%), Gaps = 0/154 (0%)
          GGSPVCLGONSOSPTSNHSPTSCPPICPGYRWMCLRRFIIFLFILLLCLIFLLVLLDYOG 60
Ouerv
\bar{S}bjct \bar{2}17
          MLPVCPLIPGSTRTSTGQCKTCTTPAQGNSMFPSCCCTKPTDGNCTCIPIPLSWAFAKYL 120
Query
      61
WVWASVRFSWLSLLVPFVRWFVGLSPTVWLSAIW 154
Sbjct 337 .ജ..... 370
```